Kafrelsheikh University Faculty of Aquatic and fisheries sciences Department of Aquaculture Subject: Ichthyology Level: One



Full marks: 50
Date 5/6/2022
Time allowed 2 hourrs.
Code: 0110102
Pages No.: one

Final exam during academic year 2021/2022

Please answer the following questions:	
First question: Complete the following sentences: (15 marks):	
1-Many scientists rating animals to, depending on the type of	f food it eat.
2-Most example of Vertebrata are	
3-Coelom is a cavity surrounds internal organs called	•••••
4-Freshwater fishes have kidneys than marine fishes.	
5-Hydrobiology Interested in studying	
6-Fishes are the first vertebrates with	
7-The most common forms of fish is shape	
8-Scales are absent in fishes.	
9-Extended fins on along the dorsal Line calledfins.	
10- Teeth are well developed in fishes.	
11- Of cartilaginous fish mouth position is	
12carp is the Fish carp spread only to the regular l	body peels.
13 is the original home of most kinds of tilapia.	
14- Thinlip Mullet fish growth rates than Striped mullet	
15 fin of great significance in the swim fish during high	speed.
Second question -: Put a True or False by the statements with error correct	tion (15 Marks)
1- Fishes includes more than 32,000 species.	()
2- Aristotle rightly called the "Father of modern taxonomy."	()
3- Vertebrates make up about 40 % of all described animal species.	()
4- In fresh water fishes: the kidney produce small amount of diluted urine.	()
5- Super Class Agnantha lack jaws	()
6- Fish anatomy is Study of the fish's body external installation.	()
7- The fly fish occurs for dorsal fin.	()
8- Closed type of branchial system is found in cartilaginous fishes.	()
9- Lateral line system is very well developed in fishes.	()
10-Bony fish skin is covered by placoid scales.	()
11-Breeding carp started in Egypt since 2000 BC.	()
12-Tilapia fish preferred water temperature between 15-20 degrees Celsius.	()
13- Catfish grow and reproduce in warm fresh water.	()
14- The main movement of the fish is done by Muscles.	()
15-Migration for Reproduction is one of the puzzles that baffled scientists.	
Third question: (12 marks)?	
A- What are specialized sciences in the study of fish?	
B- What are different divisions and a variety of fish species?	
C- Natural factors that stimulate fish to emigrate?	
D- What are different types of migration for spawning?	
Fourth question: Explained by only drawing with writing data (8 marks).	
1- Osmoregulation in fresh water fishes	
2- Gills Installation	

With my best wishes

1

جامعة كفر الشيخ - كلية علوم الثروة السمكية والمصايد

المستوى الأول

مادة: حقوق إنسان ومواطنة

01/1/17/19

الزمن: ساعتان

أجب عن السؤالين الآتيين:

س ١: اذكر خصائص ومبادئ حقوق الإنسان .

س ٢: اذكر خمسة آثار اجتماعية للفساد.

Kafrelsheikh University Faculty of Science Chemistry Department 1st Year 2021-2022





Subject:

3h

Organic Chemistry Midterm 19 /06/2022

Date: Exam in three page

Answer the following questions:

[Question 1] write the following	reactions assigning	the structures	and names o	f products
A-H (16 M)	0 0		and names o	products

a) 2-Bromobutane alc. KOH A + B	d) Acetaldehyde LiAlH ₄ G
b) n-Propyl chloride $\xrightarrow{\text{Mg}}$ C $\xrightarrow{\text{H}_2\text{O} / \text{H}^+}$ D	e) <i>tert-</i> Butanol — 20% H ₂ SO ₄ → H
c) Acetylene+ H ₂ O —— F Question 2] (29 M)	

- a) Explain WHY (using chemical reactions in need) (6 M)
 - Acetylene has acidic character
 - Ethanol has higher boiling point than ethane.
 - Addition of HBr to propene 2-bromopropane not 1- bromopropane
 - b) Draw the chemical structure of the following systematic names (10 M)
 - 2- Bromo-5-methyl-3-hexyne
 - 3-Ethyl-2,4-pentadione
 - 3-Chloro-4-hexenal
 - 2, 3- Dichloro-1-butene
 - Freon gases

c) Explain the mechanism of the following reaction (5 M)

i) C_2H_6 + Cl_2 in the presence of light

d) Which of the following ions and molecules is electrophile & Nucleophile and WHY? (8 M)

Α	В	С	D	E	F	G	Н
CH=C	H ₂ O	Br ⁽⁺⁾	H ₂ C=CH ₂	BF ₃	NO ₂ (+)	NH ₃	Br ⁽⁻⁾

Question 31 Choose the correct answer of the following (15 MA)

	c correct ariswer of the it	mowing (15 M)	
 Which one from CH₃CH₂=CH₂CH=CH 	n, the following is incoming H_2 ?	orrect name for the o	organic compound
(A) Amylene	(B) 1,3-Pentadiene	(C) 2,4-diPentene	(D) Pentylene
2. The molecular form	mula of 2,3,4-trimethypen	tane is:	
(A) C ₈ H ₁₂	(B) C ₈ H ₁₀	(C) C ₈ H ₁₄	(D) C ₈ H ₁₈
 Haloform reaction afforded finally: 	of ethyl alcohol with a	an excess of iodine and	sodium hydroxide
A) Sodium acetate and C) Sodium formate and 4. Wurtz reaction of 6 A) n-Propane	bromoform (E ethyl bromide in presence	B) Sodium formate and iodD) Sodium acetate and broof sodium in ether gave:ure of ethane and n-butan	moform
C) n-Butane	(D) A mixt	ure of ethane, propane, a	nd n-butane

Kafrelsheikh University Faculty of Science Chemistry Department 1st Year 2021-2022





Subject: Organic Chemistry
Midterm
Date: 19 /06/2022
Exam in three page

5. C_2H_6O is the molecular formula of two organic compounds (1)... and this consider as....(2) isomerism

(A) (1) Ethanol and methanol (2) constitutional	tutional	(B) (1) Ethyl	alcohol and n-p	ropanol (2)
(C) (1) Ethanol and dimethyl ether (2) configurational	onstitutional	(D) n-Propa	nol and isopr	opanol (2)
6. The correct name of the organ	ic compound in ri	ight side is:		CH ₃ CH ₂
(A) 3,3-Diethyl-5-isoprpoyl-4-methy	/loctane			CH-C-CH ₂ CH ₃ CH ₃ CH ₂
(B) 4-Isopropyl-5-methyl-6,6-diethyl	octane		H ₃ C CH ₃	CH ₃
(C) 3,3-Diethyl-4-methyl-5-isopropyl	octane	(D) 3,3-Diethyl-	-5-propyl-4-met	hyloctane
7. Addition of HBr to 1-butene aff	orded:			-1
(A) 1-Bromobutane	(B) 3-Bromob	utane		
(C) 2-Bromobutane	(D) A mixture	of 1-bromobuta	ane and 2-brom	obutane
8. Addition of bromine to propen	e in carbon tetrac	hloride afforde	d:	
(A) 1-Bromopropane		2-Dibromopropa		
(C) 2-Bromopropane		3-Dibromopropa		
9. Dehalogenation of 2,3-dibromo				
(A) 2-Butene (B) 1,3-Butdie	ă	Butyne	(D) 2-Butyne	
 10. Addition of HBr to 1-propene in (A) 1-bromopropane (C) 3-bromopropane bromopropane 11. Addition of two molecules of Cl₂ 	(B) 2-b (D) A	romopropane mixture of 1- b	promopropane	and 2-
(A) 1,2-Dicloroethane	4-1	,2,2-Tetrachloro	othana	
(C) 2,2-Dichloroethylene		-Dichloroethyler		
12. The IUPAC name of organic com				
(A) Isohexanol		-Diethyl ethanol	CH ₂ -CH ₂ -	CH ₂ CH ₃ CH-CH ₂ -OH
(C) 3-Ethyl-4-butanol	(D) 2-Et	thyl butanol	C113 C112	cn-cn ₂ -on
13. The carbon atoms in Ethylene: (A) All are sp³ hybridized (C) All are sp hybridized 14. The organic compound (CH₃)₃C-O	(B) All are sp ² h (D) One carbon H is considered a	is sp and other	is sp2 hybridize	d
(A) Secondary alcohol (C) Monohydric alcohol 15. Removal of carbon dioxide from ((D) Both	iary alcohol n "A" and "C" is called:		

(A) Carboxylation

(B) Decarboxylation

(D) Hydroxylation

(C) Dehydration

Kafrelsheikh University

Faculty of Aquatic and Fisheries Sciences

Course: principles of aquaculture Academic level: 1st year, 2nd semester

Program: Aquaculture



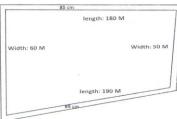
Date: 22/6/2022 Time: 2 hours Total marks: 50 mark Academic number: Student name:

Q. I. (30 mark)

A. Complete the following sentences: (10 marks, 2 for each point)	
1- Embankment slope of Loamy silt soil dyke is	
2is process of removing decomposed materials and feed remnant from po	and bottom.
3- Highly alkaline water should be treated withfor proper aquaculture.	
4-silver carb is suffering from consumer refusal due to	
5 is process of aquatic harvest from large water bodies with help of p	opulation dynamics.
B. Compare between each of the following: (10 marks, 5 for each point)	
1- Aquaculture systems (stocking density). 2- Primary and secondary sources of	fish infection
C. Write short notes on each of the following: (10 marks, 5 for each point)	
1- Materials used for organic dry ponds fertilisation.	
2- Benefits and times of fish sampling during production cycle	
<u>Q. II.</u> (20 mark)	
A. Answer the following with (V) or (x) and correct the wrong one: (10 marks,	2 for each point)
1. The fish should have the same feeding behaviours in polyculture farm	().
2. Linear type race-way is better than lateral type fish farming	().
3. Testing of soil suitability for pond construction is performed throughout ground permeability and squeeze tests respectively	nd water, water ().
4. The dyke crest and slope should be free from plants or grasses	().
5- Rivaldi valve control the height of water column in fish pond	(_).
B. Please, read the following and answer the question: (10 marks)	
You are admitted to visit a fish farm. The pond was designed according to the following diagram. After careful study of the pond, please mention only five faults in this pond construction.	ength: 180 M Width: 50 M
len	ngth: 190 M

ALL THE BEST

Radi A. Mohamed



Kafrelsheikh University faculty of Aquatic and Fisheries Sciences First level Second Term 2021/2022 Subject: Biochemistry (0110301)



Time: 3h Total Marks: 100 (50 Written, 10 Oral, 15 Exercises, 25 Annual activities) Date: 22/06/2022

Page 1

Exam pages: 4
(عدد صفحات الإمتحان: أربعة)

Q1. [12 Marks]

أ.م. د/ هبه عبد الغني صهيون

1. Choose from column (B) the suitable for column (A): [10 Marks]

A	В
1. Organic nutrients that body does not synthesized and must be	a. Vitamins
obtained from the foods	b. Calcium
2. Vitamin D deficiency leads to	c. Scurvy
	d. Night blindness
3. Thiamin deficiency produces the disease known as	e. Vitamin K
	f. Calcitriol
4. Vitamin C is used to treat	g. Rickets
5. Functions primarily to regulate calcium and phosphorous homeostasis	h. Vitamin E
	i. Vitamin B ₃
6. Maintain normal levels of the blood clotting proteins	j. Minerals
7. Its deficiency leads to Increase in red blood cell fragility	k. Anemia
8. Deficiency associated with the condition known as pellagra	I. Cobalamin
e. Its deficiency leads to a disease called Pernicious anemia	m. Folic acid
10. Builds bones and teeth	n. Beriberi

2. Draw the structure of the fatty acid (21:3n; Δ 4,9,16)? (2 Marks)

Q2. [18 Marks]: Part 1: Compare between the followings *IN SHORT NOTES*: (12 Marks)

Reversible denaturation	Irreversible denaturation
The state of the s	

Kafrelsheikh University Faculty of Aquatic and Fisheries Sciences First level Second Term 2021/2022 Subject: Biochemistry (0110301)



Time: 3h

Total Marks: 100 (50 Written, 10 Oral, 15

Exercises, 25 Annual activities)

Date: 22/06/2022

Exam pages: 4

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Page 2

3. LDL HDL rt 2: Give reasons: (6 Marks) Yrosine is a nonessential amino acid but, in some people, it is essential. clobular protein is water soluble while fibrous protein is insoluble, with example for each.	2. Lyases enzyme class	Oxidoreductase enzymes class
rt 2: Give reasons: (6 Marks) Yrosine is a nonessential amino acid but, in some people, it is essential. Blobular protein is water soluble while fibrous protein is insoluble, with example for each.	ANALOS (CARLOS CARLOS C	and of didectase enzymes class
rt 2: Give reasons: (6 Marks) Yrosine is a nonessential amino acid but, in some people, it is essential. Blobular protein is water soluble while fibrous protein is insoluble, with example for each.		
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lobular protein is water soluble while fibrous protein is insoluble, with example for each.	rt 2: Give reasons: (6 Marks)	WALLEY TO COMPANY OF THE PROPERTY OF THE PROPE
	yrosine is a nonessential amino acid but	, in some people, it is essential.
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Kafrelsheikh University culty of Aquatic and Fisheries Sciences First level Second Term 2021/2022 Subject: Biochemistry (0110301)



Time: 3h
Total Marks: 100 (50 Written, 10 Oral, 15
Exercises, 25 Annual activities)
Date: 22/06/2022
Exam pages: 4
(عدد صفحات الإمتحان: أربعة)

C. The tRNA	Tave a clover last	1	(.5	(عدد صفحات الإمتحال: ا
- THE CHIVA	nave a clover leaf sh	ape, while mRNA	is straight	
***************************************				buot assessed
	•••••••			
				THE STATE OF THE S
Q3. Put a circ	le around the corr	oot		
	le around the corr	ect answer of th	ne followings: [20	Marks]
1. Which of	the following types	of molecules is t		
a. Sucrose	h en	zymes		terial?
			c. lipids	d. nucleotides
The function	nal group that resp	onsible for the re	ducing shares	ng delimina
carbon atom no	ımber	The for the fe	ducing characters	of glucose is found on the
(a) 6	(b) 2	(c) 1		
	Man .		(d) 5	
3. The branch	ed component of st	arch is		
a. Amylose	b. Amylopectin			
	ar, any topecum	c. Dextri	n d. Gluco	ose
4. Glycogen con	tains			
a. α 1,4 and α 1.	6 glyosidic linkage			
c. α 1,4 and β 1.	glyosidic linkage		b. α 1,6 gl	yosidic linkage
, ,	61703Idic IIIIKage		d. β 1,4 an	dβ1,6 glyosidic linkage
. Which of the	following is not a co			, , , , , , , , , , , , , , , , , , , ,
a. Lectin	b. Cephalin	impound lipid?		
	b. Cephalin	c. Waxes	d. Phosphol	ipids
. Which among	the following:			
a) Stearic	the following is sat	urated fatty acid?	?	
- y creditie	(b) Oleic	(c) Linolenic	(d) Aspartic	
. The main linid	compatitude of the company			
. Cholesterol	constituent of the	cell membrane ar	·e	
· cholesteror	b. Triglyo	cerides	c. Glycolipids	d. Phospholipids
Nor aninanh				a. i nospilolipias
histidina	e is derived from a	mino acidsar	nd used as	
. mstidine, stero	id hormone	B. arginine, sex ho		sino nourot
A4				sine, neurotransmitter
At neutral pH,	a mixture of amino	acids in solution	would be predomi	nantly
) Dipolar ions	(B) Nonpolar molec	cules (C) Positive	and monovalent	
		, ,	and monovalent	(D) Hydrophobic
. An example of	purine base is			
Uracil b.	Thiamin c. Cytos	sine d A	denine	
. Which carbon	of the pentose is in	ester linkago wit	h Al- I I	
C4	of the pentose is in b. C5	c. C3	in the phosphate in	a nucleotide?
		c. cs	d. C2	

Kafrelsheikh University
Faculty of Aquatic and Fisheries Sciences
First level
Second Term 2021/2022
Subject: Biochemistry (0110301)



Time: 3h

Total Marks: 100 (50 Written, 10 Oral, 15 = Exercises, 25 Annual activities)

Date: 22/06/2022

Exam pages: 4

	(011	(X	عاصمة كثر الذجع ufreisheikh University	ربعة)	Exam pages: 4	110)
12. Nucleotide	s in a single s	trand are linked	d to one an	ath and a little	, , ,	
a. hydrogen bo	and b.	glycosidic linka	ge c.	disulphide bon	c acid by d d. phosph	odiester bor
13. Anticodon	present in					
a. DNA	b. rRNA	dell'	c. mRNA	d. tR	NA	
14. Gene is						
a. mRNA	b. anticodo	n c. a segme	nt of DNA	d. a complet	e DNA molecule	140
15. Where do to	ne substrates	attach to an er	7vmo2			
a. peptide bond	b. r	ing binding site	e	c. active site	d. enzymatic	site
16. The simples	t amino acid i	S				
a) Proline	b) met	hionine) glycine	d) serine	
17. What is the	function of AT	P, adenosine t	riphosphat	02		
a. message carri	b. store	e and transport	energy	c. make prote		down sugars
18. The true stat (A) All amino acid (B) All amino acid (C) Some amino acid (D) All amino acid	ds contain pos acids contain o	itively charged	negative ch side chains	arges	is:	01,4 and 1
19. Which of the a. deoxyribose an c. Purine and pyri		found in nucle	b. pro	NA and RNA re teins and enzyn ars and starche	nes	
20. In many prote (A) α-helix	eins the hydro (Β) β-Sheet	gen bonding pi (C) Both (A)	roduces a r and (B)	egular coiled ar (D) None of t	rrangement call these	ed
		Ena	ofexar	27		

أ.م. د/ هبه عبد الغني صهيون

Page 4

With my best wishes

Kafrelsheikh University Faculty of Aquatic and Fisheries Sciences



Academic year: First level Course: aquaculture Engineering

Final Exam (winter semester) Academic year 2021 – 2022 Time: 2 hours Full mark: 50 degree

Academic student number:

Student name:

Examiners committee: Prof. Dr. Mona Morgan Kassem

Answer the following questions :-

First Question:-

Exam date: 26 /6/2022

Degree (30)

1. Describe in the diagram:

- a) The types of heat exchangers?
- b) Construction and function of a heat pump?
- c) The types of aerators?
- d) Design of a re-use system in Aquaculture?
- e) Types of closed production units?
- 2. Mention in the points Physical and chemical aspects of water quality?
- 3. Explain in short sources of oxygen?

Second Question:-

Degree (20)

- 1. Explain in points factors regulates the growth of the bacterial culture?
- 2. Mention in points types of biological filter?
- 3. Explain in points advantages and disadvantages of Recirculating Aquaculture?
- 4. Mention in points types of Mechanical Filter and Biological Filter?
- 5. Explain in points Types of feeding equipment?

Good Luck ,,,,,,,,,,,,

M2 12